AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A digital recording apparatus that obtains a digital stream including a plurality of frames, while recording the digital stream on a digital recording medium, the digital recording apparatus comprising:

an obtaining ~~means for obtaining~~ unit operable to obtain, during a recording, an instruction to perform a predetermined procedure in which a recording area for the recording has to be changed from a first recording area to a second recording area which is not necessarily continuous to the first recording area; and

an execution control ~~means for~~ unit operable to, in case that the obtaining ~~means~~ unit obtains the instruction and when the number of frames which are recorded in the first recording area is a predetermined number or more,

(1) ~~executing~~ execute the predetermined procedure, and

(2) ~~allowing~~ allow the recording area to be changed from the first recording area to the second recording area after the execution of the procedure.

2. (Currently Amended) The digital recording apparatus of Claim 1,

wherein the execution control ~~means~~ unit includes:

an execution permitting ~~means for~~ unit operable to, when the obtaining ~~means~~ unit obtains the instruction,

(1) immediately ~~permitting~~ permit the execution of the predetermined procedure, in case that the number of the frames which are recorded in the first recording area is the predetermined number or more, and

(2) ~~waiting~~ wait for the number to increase to the predetermined number or more and

then permitting the execution of the predetermined procedure, in case that the number

is less than the predetermined number;

an execution ~~means for executing~~ unit operable to execute the predetermined procedure

when the execution permitting ~~means~~ unit permits the execution; and

a recording area changing ~~means for allowing~~ unit operable to allow recording on the first

recording area to stop before the execution of the predetermined procedure and ~~allowing~~ to allow

recording on the second recording area to start after the execution of the procedure.

3. (Currently Amended) The digital recording apparatus of Claim 2,

wherein the digital recording apparatus ~~records~~ is operable to record the digital stream as

one object or ~~partitions~~ to partition the digital stream into a plurality of objects and ~~records~~

record the partitioned objects,

wherein each of the objects is recorded on a continuous recording area on the digital

recording medium, and the continuous recording area is not necessarily continuous with the other

recording areas,

wherein the obtaining ~~means obtains~~ unit is operable to obtain an instruction for a

predetermined procedure in which an object has to be partitioned concurrently with the execution

of the procedure, and

wherein the recording area changing ~~means for allowing~~ unit is operable to allow a first

object being recorded in the first recording area to be completed before the execution of the

predetermined procedure and ~~allowing~~ to allow a second object to be recorded on the second

recording area after the execution of the predetermined procedure.

4. (Currently Amended) The digital recording apparatus of Claim 3,

wherein a video resolution is specified for each frame,

wherein all frames included in one object must be a same video resolution, and

wherein the instruction includes an instruction that a video resolution of a frame is

changed from a first video resolution to a second video resolution during recording,

wherein the digital recording apparatus further includes:

a video resolution recording ~~means for~~ unit operable to

(1) ~~recording~~ record information on the first video resolution that is specified for all

frames included in the first object before the execution of the predetermined

procedure, and

(2) ~~recording~~ record information on the second video resolution that is specified for all

frames included in the second object after the execution of the procedure.

5. (Currently Amended) The digital recording apparatus of Claim 4,

wherein it takes a certain amount of time for a reproduction head of a reproduction

apparatus to seek an object from another object, when the two objects are continuously

reproduced using the reproduction apparatus and are not continuous with each other on the

digital recording medium, and

wherein the predetermined number specified by the execution control ~~means~~ unit is not

less than a number that is necessary for realizing a seamless reproduction without being

influenced by the expected maximum seeking time.

6. (Currently Amended) The digital recording apparatus of Claim 5,

wherein the digital recording medium is a writable DVD-disk,

wherein the digital recording apparatus is a DVD recording apparatus that records a

digital video stream on the writable DVD-disk, and

wherein the object is a VOB conforming to the DVD-VideoRecording standard.

7. (Currently Amended) The digital recording apparatus of Claim 4, further

comprising:

a resolution decision ~~means for~~ unit operable to

(1) ~~detecting~~ detect a value of a high frequency component of the frame,

(2) ~~deciding~~ decide a video resolution in accordance with the value, and

(3) in case that the video resolution should be changed, ~~giving~~ give the obtaining ~~means~~

unit an instruction to change the video resolution as the instruction;

wherein the execution ~~means changes~~ unit is operable to change a video resolution to the

video resolution decided by the resolution decision ~~means~~ unit, when the execution permitting

~~means~~ unit permits the execution of the procedure.

8. (Currently Amended) The digital recording apparatus of Claim 3,

wherein the obtaining ~~means~~ unit includes:

a receiving ~~means for receiving~~ unit operable to receive an instruction for a procedure

during recording; and

5

a discrimination ~~means for discriminating~~ unit operable to discriminate whether the instruction received by the receiving ~~mean~~ unit is an instruction for the predetermined procedure or an instruction for the other procedures,

wherein recording times of all frames included in a same object are continuous,

wherein the predetermined procedure includes a recording pause, and

wherein the other procedures include cancellation of the recording pause,

wherein, when the discrimination ~~means~~ unit recognizes that the receiving ~~means~~ unit has received the instruction for the recording pause, the execution permitting ~~means~~ unit is operable to

    (1) immediately ~~permits~~ permit the execution of the recording pause, in case that the number of frames included in the first object is the predetermined number or more, and

    (2) ~~waits~~ wait for the number to increase to the predetermined number or more and then permits the execution of the recording pause, in case that the number is less than the predetermined number,

wherein the execution ~~means~~ unit is operable to

    (1) ~~allows~~ allow recording to pause and ~~makes~~ make the apparatus a standby mode, when the execution permitting ~~means~~ unit permits the execution of the recording pause, and

    (2) ~~allows~~ allow recording to be resumed, when the discrimination ~~means~~ unit recognizes that the receiving ~~means~~ unit has received the instruction for the cancellation of the recording pause during the standby mode, and

wherein the recording area changing ~~means allows~~ unit is operable to allow the first object being recorded on the first recording area to be completed before the execution of the

recording pause by the execution ~~means~~ unit and ~~allows~~ to allow the second object to be

recorded on the second recording area after the execution ~~means~~ unit allows the resumption of

recording.

9. (Currently Amended) The digital recording apparatus of Claim 8,

wherein it takes a certain amount of time for a reproduction head of a reproduction

apparatus to seek an object from another object, when the two objects are continuously

reproduced using the reproduction apparatus and are not continuous with each other on the

digital recording medium, and

wherein the predetermined number specified by the execution control ~~means~~ unit is not

less than a number that is necessary for realizing a seamless reproduction without being

influenced by the expected maximum seeking time.

10. (Currently Amended) The digital recording apparatus of Claim 9,

wherein the digital recording medium is a writable DVD-disk,

wherein the digital recording apparatus is a DVD recording apparatus that records a

digital video stream on the writable DVD-disk, and

wherein the object is a VOB conforming to the DVD-VideoRecording standard.

11. (Currently Amended) A digital recording program stored on a computer readable

medium that has a computer obtain a digital stream including of a plurality of frames, while

recording the digital stream on a digital recording medium,

the program having the computer conduct a method comprising the steps of:

(a) an obtaining step ~~for~~ of obtaining, during a recording, an instruction to

perform a predetermined procedure in which a recording area for the

recording is changed from a first recording area to a second recording area

which is not necessarily continuous to the first recording area; and

(b) an execution control step ~~for~~ of, in case that the instruction is obtained in the

obtaining step and when the number of frames which are recorded in the first

recoding area is a predetermined number or more,

    (1) executing the predetermined procedure, and

    (2) allowing the recording area to be changed from the first recording area

    to the second recording area after the execution of the procedure.

12. (Currently Amended) The digital recording program of Claim 11,

wherein the execution control step includes the sub steps of:

an execution permitting sub step ~~for~~ of, when the obtaining step obtains the instruction,

(1) immediately permitting the execution of the predetermined procedure, in case that the

    number of frames which are recorded in the first recording area is the predetermined

    number or more, and

(2) waiting for the number to increase to the predetermined number or more and then

    permitting the execution of the predetermined procedure, in case that the number is

    less than the predetermined number;

an execution sub step ~~for~~ of executing the predetermined procedure when the execution

permitting sub step permits the execution; and

a recording area changing sub step ~~for~~ of allowing recording on the first recording area to stop before the execution of the predetermined procedure and allowing recording on the second recording area to start after the execution of the procedure.

13. (Currently Amended) The digital recording program of Claim 12,

wherein the digital recording program has the computer record the digital stream as one object or partition the digital stream into a plurality of objects and record the partitioned objects,

wherein each of the objects is recorded on a continuous recording area on the digital recording medium, the continuous recording area is not necessarily continuous with the other recording areas,

wherein the obtaining step obtains an instruction for a predetermined procedure in which an object is partitioned concurrently with the execution of the procedure, and

wherein the recording area changed sub step ~~for allowing~~ allows a first object being recorded in the first recording area to be completed before the execution of the predetermined procedure and ~~allowing~~ allows a second object to be recorded on the second recording area after the execution of the predetermined procedure.

14. (Currently Amended) The digital recording program of Claim 13,

wherein a video resolution is specified for each frame,

wherein all frames included in one object must be a same video resolution, and

wherein the instruction includes an instruction that a video resolution of a frame is changed from a first video resolution to a second video resolution during recording,

wherein the digital recording program has the computer conduct the further step of:

a video resolution recording step ~~for~~ of

(1) recording information on the first video resolution that is specified for all frames

included in the first object before the execution of the predetermined procedure, and

(2) recording information on the second video resolution that is specified for all frames

included in the second object after the execution of the procedure.

15. (Currently Amended) The digital recording program of Claim 14, ~~and having~~

wherein the digital recoding program has the computer conduct the further step of:[[,]]

a resolution decision step ~~for~~ of

(1) detecting a value of high frequency component of the frame,

(2) deciding a video resolution in accordance with the value, and

(3) in case that the video resolution should be changed, giving an instruction to change

the video resolution in the obtaining step as the instruction;

wherein, in the execution sub step, a video resolution is changed to the video resolution

decided in the resolution decision step, when the execution of the procedure is permitted in the

execution permitting sub step.

16. (Currently Amended) A digital recording method for obtaining a digital stream

consisting of a plurality of frames, while recording the digital stream on a digital recording

medium,

the digital recording method comprising the steps of:

(a) an obtaining step ~~for~~ of obtaining, during a recording, an instruction to perform a predetermined procedure in which a recording area for the recording is changed from a first recording area to a second recording area which is not necessarily continuous to the first recording area; and

(b) an execution control step ~~for~~ of, in case that the instruction is obtained in the obtaining step and when the number of frames which are recorded in the first recording area is a predetermined number or more,

(1) executing the predetermined procedure, and

(2) allowing the recording area to be changed from the first recording area to the second recording area after the execution of the procedure.

17. (Currently Amended) The digital recording method of Claim 16,

wherein the execution control step includes the sub steps of:

an execution permitting sub step ~~for~~ of, when the obtaining step obtains the instruction,

(1) immediately permitting the execution of the predetermined procedure, in case that the number of frames which are recorded in the first recoding area is predetermined number or more, and

(2) waiting for the number to increase to the predetermined number or more and then permitting the execution of the predetermined procedure, in case that the number is less than the predetermined number;

an execution sub step ~~for~~ of executing the predetermined procedure when the execution permitting sub step permits the execution; and

11

a recording area changing sub step for of allowing recording on the first recording area to stop before the execution of the predetermined procedure and allowing recording on the second recording area to start after the execution of the procedure.

18. (Currently Amended) The digital recording method of Claim 17,

wherein the digital stream is recorded as one object or the digital stream is partitioned into a plurality of objects and the partitioned objects are recorded,

wherein each of the objects is recorded on a continuous recording area on the digital recoding medium, and the continuous recoding area is not necessarily continuous with the other recording areas,

wherein the obtaining step obtains an instruction for a predetermined procedure in which an object is partitioned concurrently with the execution of the procedure, and

wherein the recording are changing sub step for allowing allows a first object being recorded in the first recording area to be completed before the execution of the predetermined procedure and allowing allows a second object to be recorded on the second recording area after the execution of the predetermined procedure.

19. (Currently Amended) The digital recoding method of Claim 18,

wherein a video resolution is specified for each frame,

wherein all frames included in one object must be a same video resolution, and

wherein the instruction includes an instruction that a video resolution of a frame is changed from a first video resolution to a second video resolution during recording,

wherein the digital recording method further includes the step of:

a video resolution recording step ~~for~~ of

(1) recording information on the first video resolution that is specified for all frames included in the first object before the execution of the predetermined procedure, and

(2) recording information on the second video resolution that is specified for all frames included in the second object after the execution of the procedure.

20. (Currently Amended) The digital recording method of Claim 19 ~~and~~ further comprising the ~~further~~ step of:

a resolution decision step ~~for~~ of

(1) detecting a value of a high frequency component of the frame,

(2) deciding a video resolution in accordance with the value, and

(3) in case that the video resolution should be changed, giving an instruction to change the video resolution in the obtaining step as the instruction;

wherein, in the execution sub step, a video resolution is changed to the video resolution decided in the resolution decision step, when the execution of the procedure is permitted in the execution permitting sub step.